

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number
WO 2004/112564 A2

(51) International Patent Classification⁷: A61B

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number: PCT/IL2004/000554

(22) International Filing Date: 21 June 2004 (21.06.2004)

(25) Filing Language: English

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(26) Publication Language: English

(30) Priority Data:
156582 22 June 2003 (22.06.2003) IL

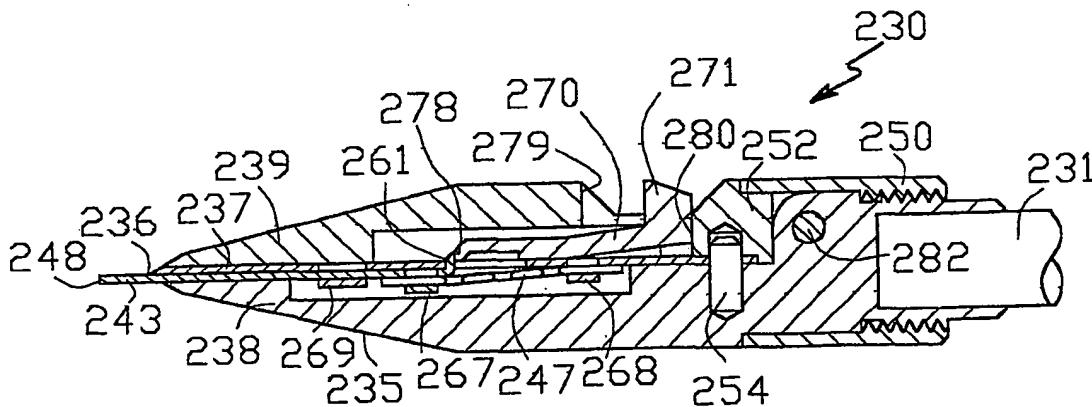
Published:

— without international search report and to be republished upon receipt of that report

(71) Applicant and
(72) Inventor: POPOV, Sergey [IL/IL]; Alexander Yanai Street 32/17, P.O.Box 4583, 84144 Beer Sheva (IL).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SAFETY TROCAR OBTURATOR



WO 2004/112564 A2

(57) Abstract: A trocar obturator for minimal invasive surgery (see fig.34) comprising: an apex knife adapted to carrying out an initial incision in a body cavity wall and a knife protecting shield movable between retracted and extended-protecting positions during patient's tissue penetrating. There is a means for locking the shield in its protecting position after piercing a patient's skin. In version embodiment the lock means includes a control knob for shield unlocking, fully disposed in the penetrating head at distal obturator part. This lock means design allows its using along with the knife and shield as the constituents of detachable penetrating subassembly adapted for mounting on the obturator by a quickly acting connector. After piercing the patient's skin, the shield is transformed into a blunt penetrating tip forming a passageway in patient's soft tissue and in peritoneum by a safe manner.